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No. 158



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## PEOPLE'S REPUBLIC OF CHINA SCIENTIFIC ABSTRACTS

### No. 158

This serial publication contains abstracts of articles published in selected scientific and technical journals. JPRS is unable to honor requests for original source materials or information as to the availability of full translations of these articles.

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CHINESE JOURNAL OF INTERNAL MEDICINE

AUTHOR: CH'U Meng-ch'ing [1448 1322 0615] SU Shou-chih [5685 1108 3055/3045]

ORG: Both of Teaching and Research Group of Parasitism, Honan College of Medicine; Honan Provincial Malaria Prevention and Treatment Experimental Site Work Group, composed of Honan Provincial Public Health and Epidemic Prevention Station, Chou-k'ou District Public Health and Epidemic Prevention Station, Lu-i-hsien Public Health and Epidemic Prevention Station, and Teaching and Research Group of Parasitism, Honan College of Medicine

TITLE: "Observation of Effect of Raising Fish in Rice Paddies on Mosquito Extermination in a Program of Combining Agriculture With Fishery Production"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 142-146

ABSTRACT: With the support and assistance of Wang-lou and Ch'en-lou Production Brigades the group launched a program of raising fish in rice paddies and ditches and streams to observe the mosquito extermination results. In the 3 years of existence of the program the data indicate that when 400-500 Cyprinus carpio or Clenopharyngodon idellus are raised in a mu of rice, the density of young mosquitoes [wigglers] is reduced about 80%. The fish eat the wigglers

## [continuation of CHUNG-HUA NEI-K\*O TSA-CHIH No 3, 1976 pp 142-146]

and some rice pests as well as common weeds. The manure of the fish serves as an effective fertilizer and the yield of the rice may be increased 2-10%. Chemical fertilizer and chemical insecticide were found to be a problem. More than 30 experiments and observations have disclosed, however, if the quanity of the chemicals and the timing of their application are controlled, they will not kill the fish. When 50% E605 was used, no residue was found in the fish. It will remain in the rice seeds for as long as one month, however. It, therefore, can only be sprayed before the heading stage of the rice crop. Fish were found to be highly sensitive to 666 and 223. They should not be used in rice paddies if fish are raised in them.

AUTHOR: MENG Hsien-ch'in [1322 2009 2953] WANG Sung-shan [3769 2646 1472]

ORG: Both of Pathogen Biology Teaching and Research Group, Hopei University of New Medicine

TITLE: "Use of Ch'u-ch'ung-jing as an Anthelminthic Against Intestinal Helminth"

SOURCE: Peking CHUNG-HUA NEI-KO TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 146

ABSTRACT: The Teaching and Research Group used Ch'u-ch'ung-jing [4-imdazolyl HCl] to treat 100 cases (47 children, 53 adults) of roundworm and other intestinal helminthiasis. Feces were examined before treatment in all cases, and none had taken any other anthelminthic within one month previously. Feces were examined again 15-30 days after the drug administration. Of the group, 90 were completely negative; 9 had reduced number of eggs; the drug had no effect on one case. There were slight side-effects in 12 cases. The side-effects included dizziness, insomnia, nausea, numbness of the limbs, or abdominal discomfort; they all disappeared quickly without special treatment.

AUTHOR: CHIAO Shun-fa [3542 7311 4099]

ORG: Chi-shan-hsien People's Hospital, Shantung Province

TITLE: "Preliminary Summation of the Treatment of 6 Types of Diseases With Head Acupuncture"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 148-150

ABSTRACT: Head acupuncture is a new therapeutic technique of needle puncture of the scalp at a location corresponding with the function of the cerebral cortex to treat primarily diseases of brain origin and diseases related to the cortex and internal organs. From 1970 to September of 1975, this technique was used to treat 682 patients, suffering from the 6 diseases of cerebral thrombosis and its after effects, cerebral hemorrhage and its after effects, hypertension, chorea, paralysis agitans, and childhond nocturnal enuresis. The total effective rates were very high. The needle manipulating technique and the method of selecting the region on the head for acupuncture are described. The treatment effects on cases of each of the 6 diseases are analyzed.

ORG: Department of Internal Medicine, the Second Hospital, Hupei College of Medicine

TITLE: "Pathogenetic and Prognostic Analysis of 1,110 Cases of Hemorrhage of the Upper Digestive Tract"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 150

ABSTRACT: From 1963 to 1973, the Second Hospital treated 1,110 cases of hemorrhage of the upper digestive tract. The age of the patients varied from 5 to 83. In most cases, careless eating and drinking were the factor inducing hemorrhage. Other factors included over exhaustion, cold, aspirin, terramycin, excitement, and motion sickness. Of the 38 fatal cases, 26 died of hepatic coma. Concurrent black stool appeared to have certain prognostic significance. The fatality rate of those without black stool was 1.1%; of those with black stool was 9.3%.

AUTHOR: CH'EN Pao-chien [7115 0202 0256] WU Sha-ch'ing [0702 3097 7230]

ORG: Department of Neurology, Hsu-chou College of Medicine Hospital

TITLE: "Observation of Effects of Chang-liu-chian for the Treatment of Migraine Type Vascular Headache"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 151-152

ABSTRACT: Chang-liu-chian is a new alkaloid extracted from a species of the genus Hyoscyamus produced in T'ang-ku-la Mountains. Its chemical structure is similar to atropine, hyoscyamine, and scopolamine. Its major pharmacological action is to suppress the activity of the cerebral cortex. It can relax the smooth muscles, relieve vascular spasm, and improve micro-circulation, etc. Since its initial creation in China it has been tried for the treatment of many diseases with relatively satisfactory results (CHUNG-HUA I-HSUEH TSA-CHIH Vol 55, 1975 p 795.) The authors, in cooperation with the Department of Neurology of Szechwan College of Medicine Hospital treated 37 cases of migraine type vascular headaches and later in the hospital to which they are affiliated treated another 43 cases of the same disease. This paper analyzes the clinical data, the treatment technique, and the effects of this drug with respect to these 80 cases.

3

ORG: Basic Experiment Laboratory, Kuang-an-men Hospital, Academy of Chinese Traditional Medicine

TITLE: "Preliminary Report of an Experimental Research on the Treatment Principle of 'Bracing and Supporting Basics" in Chinese Traditional Medicine"

SOURCE: Peking CHUNG-HUA NEI-K®O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 153-155

ABSTRACT: The 'bracing and supporting basics' principle represents a school of Chinese traditional medicine involving the use of certain prescriptions of herbal drugs to benefit the air, to nurture the Yang, or the Ying depending upon the season of the year and the symptom of the disease. This paper reports a clinical and animal experimentation of the principle by conducting tests to determine the serum cortisol contents, the cellular immunity, the phagocytic activities of clasmatocytes, the duration of cardiac function, the oxygen deficiency tolerance, and the nucleic acid and sugar contents of the myocardium of either clinical patients or test animals before and after the administration of drugs according to this treatment principle. Very favorable results were obtained. The data are included in the paper. The ingredients of one prescription are described.

AUTHOR: None

ORG: Department of Infectious Diseases, Lan-chou Troop General Hospital

TITLE: "Preliminary Understandings Regarding Rescue Measures for Toxic Bacterial Dysentery"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 156-158

ABSTRACT: From the experience gained through efforts of emergency rescue of 60 cases of toxic bacterial dysentery from June to September, 1973, this paper discusses the understandings in the following 5 aspects: (1) Effective supplementation of the quantity of blood in circulation; (2)Application of agent to relieve vascular spasm; (3) Timely treatment of intracranial pressure; (4) Eliminating pathogens; (5) Strengthening nursing care.

AUTHOR: CHOU Chih-sheng [0719 6347 0524]
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ORG: CHOU, LI, WANG of Fu-yang District Infectious Diseases Hospital; KAO, CHANG, LI of Fu-yang District People's Hospital, Anhwei Province

TITLE: "Pulmonary Damage Caused by Staphylococcus Aureus Septicemia"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 159-160

ABSTRACT: Since 1972 the authors have treated 91 cases of Staphylococcus aureus septicemia. Of the group, 41 had concurrent pulmonary damage. Before 1966, 21 such cases were encountered. The 2 groups are combined for analysis. Either blood or bone marrow culture proved the diagnosis in every case and chest x-ray revealed pulmonary disorder. In every case, tuberculosis was excluded as the possibility. Folowing treatment and control of septicemia, the pulmonary disorder was absorbed. There were 6 fatalities; the remaining were cured. The physical symptoms, the chemical analyses data, the chest x-ray manifestations, and the immediate causes of the fatalities are reported.

AUTHOR: None

ORG: Department of Pediatrics, and Department of Internal Medicine, First Hospital, Peking College of Medicine

TITLE: "Clinical Significance of Leukocyte Movement Inhibition Test in Nephritis Patients"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL ME-DICINE] in Chinese No 3, 20 May 76 pp 161-164

ABSTRACT: There have been many reports relating to the immune mechanism in nephritis, and it has been generally agreed that body fluid immunity does exist in the pathogenetic mechanism of the disease. The cell immunity mechanism of nephritis has not been given any attention, however. Related reports, such as leukocyte (or lymphocyte) movement inhibition test, appeared only recently ("Pathogenetic Mechanism of Nephritis and Its Treatment Problems" by Nephritis Iaboratory, Department of Internal Medicine, First Hospital, Peking College of Medicine, CHUNG-HUA I-HSUEH TSA-CHIH Vol 56, 1976, page 56.) The degree of movement inhibition reflects the density of movement inhibition factor, i.e. the degree of cell immunity. From the test data of 105 selected cases, this paper discusses the clinical significance of the blood immunological examination.

ORG: Tumor Immune Group, Peking Institute of Bio-Products

TITLE: "Diagnosis of Liver Cancer With Erythrocyte Adherence Test to Determine Serum Alpha Fetal Protein"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 165-166

ABSTRACT: Although there are many methods for serum 4 fetal protein determination in case of liver cancer diagnosis, these methods are either not sufficiently sensitive, or too complex, or requiring special equipment. They are not suitable for general liver cancer surveys in China's rural villages and mountainous regions. In 1973, the group established an erythrocyte agglutination test to directly determine serum 4 fetal protein for liver cancer diagnosis. The data of one year's application of the test in liver cancer high incidence regions proved it to be simple, fast, highly sensitive, and specific. The technique and the test data of over 1,000 cases are reported and analyzed.

AUTHOR: None

ORG: Hepatic Diseases Group, Department of Internal Medicine, Peking Chinese Traditional Medicine Hospital

TITLE: "Several Understandings in the Treatment of Hepatitis"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 167-170

ABSTRACT: Due to the fact that Chinese traditional drugs are extremely numerous and the pharmacological function of each drug is often multitudinous, the selection of the most suitable drugs, dosage, and duration, and the reasonable coordination of a variety of them to develop joint effects and reduce side-effects are extremely important. This paper discusses the technique of learning and utilizing dialectical materialism to improve the level of symptomatic treatment of hepatitis with integrated Chinese traditional and Western medicine.

ORG: The 302 Hospital, Chinese People's Liberation Army

TITLE: "Treatment of Acute Bacterial Dysentery With Yuang-shu-hua"

SOURCE: Peking CHUNG-HUA NEI-KO TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 171

ABSTRACT: Yang-shu-hua [flower of poplar] has long been a folk remedy for dysentery in China and there have been related reports from various regions in recent years. In 1975, the authors proved in the laboratory that it does in fact have suppressing action against Bacillus dysenteriae. A program was set up to test the effects of its decoctum, its extract tablets (Li-hsiao-ling), Li-hsiao-ling with thymidine 5'-phosphate (TMP), and tetracyclin with Li-t'eling (control) to treat 4 groups of patients of acute bacterial dysentery. The results indicate that Li-hsiao-ling with TMP is the most effective. This was due largely to the action of TMP. The Li-hsiao-ling tablets are in fact not as effective as the decoctum and it is difficult to take the required large quantities. Studies on extracting the effective element of the flower of poplar are planned. Scientific name of the poplar tree is not given in the paper.

AUTHOR: None

ORG: Department of Internal Medicine, First Hospital, Hupei College of Medicine

TITLE: "Treatment of Acute Bacterial Dysentery With Polyganum Avicul Are L"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 171

ABSTRACT: Polyganum avicul are L is a wild plant, growing profusely in China's southern regions. As a drug, it is mild, nontoxic, and has fever relieving, diuretic, and antidiarrheal actions. The Microbiology and Pharmacology Teaching and Research Groups of the First Hospital had tested its 25% fresh decoctum against several strains of Bacillus dysenteriae and found it to have suppressing activity. From August 1970 to July 1974, it was made into a syrup to treat 150 cases of hospitalized acute dysentery for a duration of 7-10 days. Of the group, 146 were cured, and 4 improved. Follow-ups of 42 of the group a year later revealed 2 cases of recurrence.

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ORG: All of Yung-an Hospital, Nan-ch'ang Railway Bureau

TITLE: "Long Lasting Sulfa and TMP for the Treatment of Acute Bacterial Dysentery"

SOURCE: Peking CHUNG-HUA NEI-KO TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 171

ABSTRACT: This paper reports the treatment of 130 cases of acute bacterial dysentery at the hospital with long lasting sulfa (SDM') and thymidine 5'-phosphate (TMP). The age of the patients varied from 4 months to 73 years. In the first day after the drug administration, fever was controlled in 80.9% of the cases; diarrhea was controlled in 73.1% of the cases; and abdominal pain was controlled in 56% of the cases. Follow-ups of 76 cases of the group disclosed one case of recurrence after 3 months, and 2 cases of recurrence after 6 months.

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ORG: All of Ch'ing-p'u People's Hospital, Shanghai Municipality

TITLE: "Treatment of Typhus With Sulfa Drugs and Thymidine 5'-Phosphate"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 172

ABSTRACT: It has been reported that Sulfamethazinum (SMZ) and TMP produce good effects when they are used together to treat typhus, but SMZ is very costly. In order to test the feasibility of using SMlfadimidine (SM<sub>2</sub>) + Sulfathiazolum (ST) + Sulfadiazinum (SD) emulsion to replace SMZ, the authors, in the past 4 years, treated 94 cases with this combination; 54 cases with SMZ + TMP; and 63 cases with Chloromycetin. The effect of SMZ + TMP appeared to be no less than Chloromycetin. while the effect of ST + SD + TMP was not obviously different either.

ORG: Huang-p'u District Infectious Disease Hospital, Shanghai Municipality; Department of Infectious Diseases, P'u-tung Chung-hsin Hospital, Huang-p'u District, Shanghai Municipality

TITLE: "Treatments of Typhus With Chloromycetin and Li-t'e-ling"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL ME-DICINE] in Chinese No 3, 20 May 76 p 172

ABSTRACT: Some years ago, typhus patients were treated with 1 g of Chloromycetin for 7-30 days. There was no such side-effects as intestinal hemorrhage or perforation, aplastic anemia, etc. Follow-ups disclosed 1% recurrence. In recent years, some patients were treated with Fi-t'e-ling [Chinese brand-name for Furazolidonum]. In this paper, 2 groups of 11 cases each of similar conditions, treated with one of the 2 drugs are compared. Judging from these few cases, the effects of the 2 drugs appear to be similar, but future follow-ups may indicate that the rate of recurrence of the group treated with Furazolidonum is higher. Moreover, judging from cases of typhus treated at these 2 institutions, the major symptom appear to be hepatomegalia. This is obviously different from past reports stating that the major symptom of typhus is splenomegalia.

### AUTHOR: None

ORG: Infectious Diseases and Epidemiology Teaching and Research Laboratory, Chiung-ching College of Medicine

TITLE: "Treatment of Amebiasis With Massive Doses of Mi-ti-ling"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 172-173

ABSTRACT: From June 1973 to November 1974, 26 cases of hospitalized amebiasis were treated with massive doses of Mi-ti-ling [Metronidazolum] with very good results. For those with intestinal amebiasis, the dosage was 800 mg, 3 times daily, for 5 days. For those with additional hepatapostema, the dosage was 800 mg, 3 times daily, for 10 days. Side-effects included loss of appetite, nausea, and/or vomiting, appearing in 2-3 days after treatment. Follow-ups revealed no recurrence; various degrees of improvement was detected during follow-ups of the 6 cases of the group suffering also from abnormal liver function.

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ORG: All of Department of Internal Medicine, Nan-t'ung College of Medicine Hospital

TITLE: "Treatment of Amebic Hepatapostema With Mi-ti-ling"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 173

ABSTRACT: Since the later part of 1972, the authors have used Mi-ti-ling [Metronidazolum] to treat 31 cases of amebic hepatapostema. One group of 21 cases were treated with the drug by itself, at a dosage of 1.2-2.4 g daily for 13-46 days. All recovered completely. A second group of 6 cases were treated with Chloroquinum or Emetinum first before changing to this drug at the same dosage as the first group for 14-32 days. All recovered; follow-ups for 1 year revealed no recurrence. Another group of 4 cases were treated with the drug and Chloroquinum for 18-38 days and all were cured. The authors observed that this drug is not only effective as an amebacide, it is also beneficial for hepatapostema. The dosage should not be too small and the treatment duration should not be too short. If the effect is not obvious, Chloroquinum may be added later.

AUTHOR: None

ORG: The 225 Hospital, Chinese People's Liberation Army

TITLE: "Mistaken Diagnosis of Ankylostomiasis for Ulcers Analyzed"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pl73

ABSTRACT: Ankylostomiasis is common in rural villages of China. The milder cases have symptoms of the digestive system only and; therefore, are easily confused for ulcers. Of the 165 cases of initial diagnosis of ulcers at the 225 Hospital in the past 2 years, 16 were later discovered to be ankylostomiasis, amounting to 9.7%. The techniques of distinguishing it from ulcers are briefly discussed in the paper.

AUTHOR: LI Min [2621 2404]

ORG: None

TITLE: "Problems in Treating Concurrent Diseases of Pulmonary Tuberculosis: III. Treatment of Tuberculous Exudative Pleurisy"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 174-176

ABSTRACT: This portion of the paper discusses the following problems: (1) Problems of rest and antituberculotic drug treatment; (2) Problem of the necessity of withdrawing fluid; (3) Problem of using cortical hormone beside other drugs; (4) Problems relating to treatments of the integrated Chinese traditional and Western Medicine; (5) Problems relating to the prevention of the occurrence of tuberculous exudative pleurisy, or after pleurisy is controlled the occurrence of pulmonary tuberculosis. This paper is a part of a series outlining opinions presented at various symposiums.

#### AUTHOR: None

ORG: Division of Integrated Chinese and Western Medicine, Department of Internal Medicine, P'u-tung Chung-hsin Hospital, Shanghai Municipality

TITLE: "Treatment of Hemorrhage of Upper Digestive Tract With Chinese Traditional Hemostatic Powder"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 176

ABSTRACT: The Chinese traditional hemostatic powder is prepared with Bletilla striata (Thunb.) Reichb. f., Typha latifolia L., and Rumex crispus L. From April 1974 to May 1975, 250 cases of hemorrhage of the upper digestive tract were treated with this drug for oral application with very satisfactory results. The drug is easily administered and very inexpensive; therefore, it is well liked by the masses of farmers and workers. These cases, other concurrent treatment techniques, treatment results, and side-effects are analyzed.

AUTHOR: TAI Tzu-ying [2071 5261 5391]

ORG: Hua-shan Hospital, Shanghai First College of Medicine

TITLE: "Treatment of Infectious Shock"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 177-180

ABSTRACT: Infectious shock is also called toxic shock induced by infection from various forms of bacteria. This paper discusses techniques of handling various clinical symptoms, including dehydration, acidosis, etc. and techniques of testing to determine the various conditions of the patient. In treatment, there is no mention of any technique of Chinese traditional medicine.

AUTHOR: HUA Ching-hsi [5478 4544 6007] KU Cheng-shu [7357 3630 2885]

ORG: None

TITLE: "Diagnosis and Treatment of Typhus"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 181-184

ABSTRACT: Following the public health and prevention inoculation measures taken since the liberation, epidemics of typhus have long been basically controlled. Scattered cases may still be observed, however. If these cases are not carefully handled, localized epidemics may still be possible. Meanwhile, due to the fact that in recent years antibiotics have invariably been applied at the onset of this disease, the symptoms and specific physical signs of typhus have changed to give greater difficulties in its diagnosis. Current problems in the diagnosis of typhus and its treatment, including its treatment with Chinese traditional medicine are discussed at length in this paper.

ORG: Shanghai Institute of Chinese Traditional Medicine; Shanghai Hung-ch'iao Hospital

TITLE: "Clinical Observation of Treatment of Chronic and Recurrent Hepatitis With Schizandra Ester A"

SOURCE: Peking CHUNG-HUA NEI-KO TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 184

ABSTRACT: Schizandra ester A is one of the effective elements having the activity of reducing serum glutamic pyruvic transaminase [SGPT] extracted from Schizandra sphenanthera Rehd. et Wils by Shanghai Institute of Pharmacology. Animal experimentation proved that it acts to protect experimental liver damage and its toxicity is low. As a further study on this drug, 47 cases of chronic and recurrent hepatitis were applied orally with this drug, 300 mg-600 mg per day for 8 weeks. The percentage rate of the obviously effective, improved, and no effect was 51.1, 23.4 and 25.5 respectively. The 24 cases, for whom the drug was obviously effective were examined half a year after the treatment had been completed, SGPT of 10 of these was found to be stabilized within the normal range. There were some recurrent symptoms in the remaining 14 cases.

AUTHOR: None

ORG: None

TITLE: "Cough-Asthma Tablet"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL ME-DICINE] in Chinese No 3, 20 May 76 p 184

ABSTRACT: The Cough-asthma Tablet is the product of Wu-han Institute of Bioproducts in cooperation with Hupei College of Chinese Traditional Medicine. It is made from combining a bronchitis vaccine, Allolobophora caliginosa trapezoides (Duges), and placenta. It is suitable for simple and asthmatic chronic bronchitis, at an adult dosage of 7 tablets, 2-3 times daily for 15 days to form a treatment period. This drug is mild and has no side-effects. It may be applied for prolonged periods.

ORG: Shanghai Institute of Parasitism

TITLE: "Progress of the Past Few Years in China in Research Works for the Prevention and Treatment of Schistosomiasis"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 185-188

ABSTRACT: In the 6 years since the cultural revolution as many as 3.5 million victims of schistosomiasis have been cured. This disease has also been virtually eliminated in more than 120 hsien and municipalities. Besides, more than 800 thousand oxen have also been cured of this disease. The accomplishments of the various regions in these years in the 3 aspects of prevention, diagnosis, and treatment of schistosomiasis are described in the paper.

AUTHOR: None

ORG: Occupational Disease Prevention and Treatment Group, The Third People's Hospital, Shanghai Second College of Medicine

TITLE: "Electronmicroscopic Observation of Experimental Treatment of Toxic Hepatitis due to Carbon Tetrachloride With Schizandra Ester A"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 188

ABSTRACT: With the cooperation of Shanghai Institute of Pharmacology and other units, the group treated white mice of acute and subacute carbon tetrachloride poison with Schizandra ester A. The liver cells of the 2 groups of mice were then observed under electron microscope. The result of the experimental study indicates that the activity of this drug in reducing serum and liver tissue glutamic pyruvic transaminase is not merely as the drug's action in suppressing enzymic activities. The drug, in fact, has a protective action with respect to the cell mitochondrias of the liver.

AUTHOR: YUEH Chia-t'an [1971 1367 3389]

ORG: None

TITLE: "Prevention and Treatment of Epidemic B Type Encephalitis"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 pp 189-192

ABSTRACT: Since the cultural revolution, there have been large scale reductions of the incidence and the mortality rate of epidemic B type encephalitis. In some regions there has not been a single new case year after year. It is caused by a virus of insect vector and mosquitos are the major medium; therefore, the prevention of this disease depends upon mosquito extermination as well as inoculation of a vaccine. For treatment, various techniques of Chinese traditional medicine and Western medicine are described. A special portion of the discussion is devoted to the technique of treating respiratory failure due to this disease.

AUTHOR: None

ORG: Infectious Disease Group, Department of Internal Medicine, the Second Hospital, Ch'ung-ch'ing College of Medicine

TITLE: "Convection Electrophoresis Observation of the Suppressing Action of Chinese Traditional Herbal Drugs and Prescriptions Against B Type Hepatitis Antigen"

SOURCE: Peking CHUNG-HUA NEI-K'O TSA-CHIH [CHINESE JOURNAL OF INTERNAL MEDICINE] in Chinese No 3, 20 May 76 p 192

ABSTRACT: From December 1973 to June 1975, a study was conducted on 508 common Chinese traditional herbal drugs and/or their combinations to observe their convection electrophoresis suppressing action on B type hepatitis antigen. Each drug or each prescription of drugs is made into a 100% decoctum, centrifugalized, and filtered for the study. The pH is adjusted to 6.8 - 7.2. The experimental procedure, the names of drugs tested, and the names of the drugs found to be effective are reported.

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### CHINESE MEDICAL JOURNAL

AUTHOR: SUN Cheng [1327 2973]

ORG: Prevention of Infectious Disease Station, Nan-yang City, Ho-nan Province

TITLE: "Results of Sterilization of Drinking Well Water in the Farm With Chlorine and Ammonia"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 351-352

ABSTRACT: Ammonia and chlorine were used to sterilize drinking well water in the farms of a county in Ho-nan Province. The advantages of using ammonia and chlorine in place of the traditional use of chlorine alone are that the disappearance of excessive chlorine is much slower and so the sterilization effect lasts longer, and the water do not have the unpleasant chlorine odor. During sterilization, ammonium chloride or ammonium sulfate should first be put in, then followed by bleaching powder. Experiment showed that although the excessive chlorine with the chlorine and ammonia method was slightly lower than that with the bleaching powder method, the bactericidal effect was not lowered. Experiment also showed that the proportion of chlorine and ammonia of 1:1 was most effective.

AUTHOR: None

ORG: Safe Manure Experimental Group, Environmental Sanitation Control Section, Tsing-tao City

TITLE: "Experiment on the Management of Manure With High Temperature CH<sub>4</sub> Fermentation Method"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 353-355

ABSTRACT: The principle of management of manure with high temperature  $\text{CH}_4$  fermentation is utilizing the special living characteristics (high temperature, anerobic and alkaline environment, etc.) of marsh gas bacteria to destroy the insect ova and pathogenic bacteria in manure. The experiment was first carried out in the laboratory, in small models, in small models in the field, and then in medium 320  $\text{M}^3$  models.

Bacteria cultuvation was carried out in laboratory fermentation crocks, in rectangle fermentation pools and on the field round fermentation pools with mud sediment obtained from a dirty water sedimentation pool. Lime water was added to make the pH 7.4-7.6. The contents were heated and stirred until the temperature rose to and was maintained at 53°C. The gases produced in the first few days were mainly hydrogen sulfide (H2S). After 3-5 days

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 pp 353-355]

CH<sub>4</sub> gradually increased and reached a peak after 16-20 days. When the rate of gas production did not further rise after stirring, 5% mud sediment was added and gas production was again increased. Then 3-4 days later manure was gradually poured in. Different methods of analyses and examinations were carried out. The results showed that: Gas production was higher when the pH was higher, when fermentation was stabilized the peak of production occurred 4-6 hours after pouring in the new contents; the average combustable gas produced was slightly above 50%; the B. coli count in manure was  $10^{-6}$ —  $10^{-12}$  before fermentation and  $10^{-1}$ — $10^{-2}$  after fermentation; the ascaris ova in manure after fermentation were totally killed; the effective nitrogen content in manure after fermentation was slightly increased; using fermented and unfermented manure in cultivating turnips, potatoes and corns, production was slightly higher with fermented manure.

Medium  $320\text{M}^3$  model fermentation pools were constructed and the same principle applied. The results showed that all ascaris ova were killed after fermentation. The average daily gas production was 355.7  $\text{M}^3$  (CH<sub>4</sub> 48%), enough to supply heat for a 0.2 ton boiler and supply heat for boiling water, cooking rice and illumination. It was estimated that more than 200 catties of coal were saved each day. The nitrogen, phosphorus and potassium contents of

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 pp 353-355]

manure were slightly lower after fermentation, but the effective nitrogen content was slightly higher.

Discussion was made on the cultivation of CH<sub>4</sub> bacteria; the process of mixing the bacteria and manure; the relationship of pH to fermentation; the rate of adding new contents during high temperature fermentation; the significance of stirring in fermentation.

ORG: Prevention of Infectious Disease Station, Chi-shan County, Shan-si

TITLE: "Introducing the Management of Infectious Diseases in Our Country"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 356-358

ABSTRACT: The incidence of infectious disease has decreased to 6.39% in this county. The principle of "Prevention comes first" was stressed. Incidences of epidemic meningitis in 1967 and bacillary dysentery in 1972 were cited where prevention was neglected that resulted in epidemics. After correcting these mistakes by carrying out preventive means and mobilizing the mass to take part in sanitary work, these epidemics were controlled. An infectious disease report system was established. Medical personnel and the mass all took active parts. All infectious diseases were reported by the brigade medical station to the commune medical department, which in turn reported to the county infectious disease station. Every 1-2 years the report system was reviewed and improvements made, and the medical personnel were trained to manage the report system. Units were commended or criticized according to their work. Information about infectious disease was exchanged with other adjacent counties. When infectious diseases did occur, medical personnel

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 pp 356-358]

were sent to investigate the conditions and eliminate the source of infection. Propaganda was carried out among the mass and instructions given to prevent the disease. Susceptible individuals were given preventive medications or inoculations. The normal pattern of infectious disease was studied and appropriate measures taken. For example, a minor epidemic of measles occurred in 1969-70. Basing on the fact that susceptible individuals gradually increases and an epidemic would appear every 4-5 years, appropriate preventive measures were taken in 1973 and the epidemic was less severe.

AUTHOR: MU Ching-a [1970 4737 7093]

ORG: No 253 Hospital, Chinese People's Liberation Army

TITLE: "Construction and Trial of a Local Traction and Immobilization Frame for Fracture of the Femur"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 359-363

ABSTRACT: A frame was designed to apply local traction and immobilization for fracture of the femur. The purpose was to do away with traditional heavy traction frames that kept patients in bed for long periods. The whole frame weighs about 2 kg. The frame consists of an extremity bed, a balance spring spiral tube traction, a force receiving plate and an icetong with pin for traction. The extremity bed extends from the loin and buttock to the thigh and leg. It is made of plexiglass that is moldable and elastic and does not interfere with X-ray examinations. A strap over the loin part fastens the frame to the body. The force receiving plate is placed at the proximal end of the femur on the frame. The traction apparatus is connected with this plate. The pin is inserted in the lower end of the femur or upper end of the tibia and connected with the icetong. Rotating the screws on the traction apparatus will give extension traction. The force of traction

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 pp 359-363]

can be read on a scale on the apparatus. Applying the principles of incline plane dynamics, the whole apparatus is fixed on the body in such an angle that the body weight serves as counter traction.

It was found that use of the frame was most suitable in mid 1/3 and lower 1/3 fractures, the results were not as satisfactory in upper 1/3 fractures. Under local or acupuncture anesthesia the pin was inserted and the extremity placed on the frame. Reduction by manipulation was then carried out and traction applied. After reduction, maintainance traction with lesser force was used. In the first 1-3 weeks, X-ray examinations were repeatedly made and deformities corrected. Active and passive movements were carried out under the guidance of medical personnel. After two weeks the patients were allowed to recline or sit up. Young and strong patients were allowed to walk with double crutches after 2-3 weeks. Chinese herb medicines were given to promote healing.

Over a period of five years, this frame was used in the treatment of 82 adults with fracture of the femur. In 71 cases use of the frame was successful, in 11 cases it was a failure and other methods were used. The average traction time was 38 days, the average clinical healing time was 56 days. Among the 71 cases, excepting for 3 old agepatients, all were able to resume work in about 6 months.

ORG: Hookworm Section, Parasitic Disease Research Department, Che-kiang People's Medical Experimental Institute

TITLE: "Observations of Animal Experiments and Clinical Results of Heat Therapy in Early Hookworm Infections"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 364-366

ABSTRACT: Heat therapy for hookworm dermatitis has long been in use by the people in China. Experiments were carried out on white mice, infecting them with ancylostoma duodenale and ancylostoma americana on the abdominal wall. Twenty four hours later the infection site was treated with heat soaking, heat compresses, heat smoking or hot blowing air, and the skin and muscles at the infection site were cut off, incubated, and examined under the microscope. Results showed that the living larva count was much lower in all the groups treated with different forms of heat as compared with the control. The living larvae that survived heat therapy were injected into another group of mice, and after 72, 120 and 168 hours, dissection of these mice were carried out. Again the larva count in various types of tissues showed a marked lowered count as compared with the control. Examination of the lungs

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 pp 364-366]

in 10 mice with infection with heat treated larvae showed mild hyperemia and petechia in 2, whereas in the control group 9 of 10 showed wide spread petechia or plaque like ecchymosis.

Heat therapy was used in 320 cases of hookworm dermatitis. Treatment was carried out within 24 hours of infection. Criteria to judge the effects included cessation of itching, disappearance of dermatitis and whether there were respiratory symptoms. Heat soaking was given to 12 patients, hot compresses to 116 cases, heat smoking to 106 cases and hot air blowing to 86 patients. Most of them showed immediate relief of itching and disappearance of dermatitis, only a few developed respiratory symptoms. In some patients, vermifuges were given 12-47 days after heat therapy, young worms were found in the stool in only a few.

AUTHOR: WANG Wei-sheng [3769 3555 8508] MENG Ch'ing-ho [1322 1987 0735]

ORG: Surgical Department, Harbin Railroad Center Hospital

TITLE: "Subtotal Gastrectomy With Pursestring Inversion of the Duodenal Stump"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 367-368

ABSTRACT: During 1963-1973, 500 cases of subtotal gastrectomy were performed. In 489 cases the duodenal stump was closed with suture ligation and invagination with a pursestring suture. In 11 cases the duodenal stump was not closed with a pursestring suture because of a large penetrating fixed ulcer on the posterior wall. No complications occurred attributable to the pursestring suture technique. The procedure of closing the duodenal stump was described in detail.

AUTHOR: None

ORG: Urology Department, First People's Hospital, Shanghai

TITLE: "Analysis of 233 Cases of Chyluria"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 369-371

ABSTRACT: During 1952-1972, 233 cases of chyluria were admitted for treatment. The urine was purely chylous in 130 cases and chylosanguineous in 103 cases. In 86 cases there were chylous jelly which sometimes caused difficulty in urination or retention of urine. In most cases the chyluria was intermittent, in only 11 cases was chyluria continuous. There were exciting causes in 163 cases, mainly over exertion and high fat diets. Soreness of the loins occurred in 116 cases. The Hgb was determined in 93 cases, 10 of whom showed severe anemia. Marked loss of weight was found in 14 cases. In 132 cases in whom urinalysis was performed on admission, 112 showed RBC and 111 showed WBC in the urine, 124 showed albuminuria. Filaria was looked for in the blood of 86 patients, 38 were positive. Before 1964, the diagnosis was made by performing cystoscopy to observe chylous excretion from the ureters, and retrograde pyelography was

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performed to observe retrograde lymph flow in the calyces and pelves. After 1964 the diagnosis was made by performing lymphography.

Non-operative treatment was given to 89 cases, which included bed rest, fat free diet, Chinese herb medicine, anti-inflammatory drugs and flushing of the pelvis. All were discharged with normal urine. Operative treatment was performed on 134 patients, which included unilateral ligation of kidney hilum lymphatic ducts in 103, bilateral ligation in 10, and ligation of hilum lymphatic ducts plus anastomosis of the main lumbar lymphatic duct to spermatic cord (or ovarian) vein in 31. Followup studies of 35 to 89 non-operative cases showed 3 recovered and 4 with recurrence in 1-2 years; 6 recovered and 8 with recurrence in 5 years; 4 recovered and 10 with recurrence in 10 years. Followup studies of 90 operative cases showed 54 recovered and 7 with recurrence in 61 unilateral ligation of kidney hilum lymphatic ducts; 8 cured and 1 with recurrence in 9 bilateral ligation; 19 cured and 1 with recurrence in 20 cases with hilum duct ligation plus anastomosis of the main lumbar lymphatic duct to spermatic cord (or ovarian) vein.

The pathogenesis of chyluria was discussed. Obstruction of the distal part of the thoracic duct was considered an important factor. Filariasis was also a contributing cause. Operative treatment was considered superior to non-operative treatment.

AUTHOR: CHEN Chih-pai [7115 0037 4101] LIANG Mu-ju [2733 1970 0320] CHOU K'o-kuang [0719 0668 0342]

ORG: Surgical Department, Kwang-tung Provincial People's Hospital

TITLE: "Reconstruction of the Thumb by Mobilization and Transplantation of the Metacarpal Bone and Its Soft Tissues"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 372

ABSTRACT: A 44-year-old carpenter had his left thumb and index finger cut off accidently with an electric saw at the metacarpal phalangeal joint. Immediate reimplantation was unsuccessful. Two months later he was admitted for reconstruction of the thumb. The second metacarpal bone was isolated together with its attached muscles and soft tissues. The arteries, veins and nerves were severed. The adductor hallicus was severed. The metacarpal bone was cut off at the metacarpal carpal joint and the flexor and extensor tendons severed. This entirely mobilized metacarpal bone was transplanted to the site of the severed first metacarpal. Two Kirschner's wires were used to fix the two metacarpals. The arteries, veins and nerves around the

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 p 372]

first metacarpal were dissected out and one vein, one artery and one nerve anastomoses were made. Post operative swelling, cyanosis and skin coldness occurred but soon improved after appropriate treatment. The Kirschner's wires were removed 6 weeks later and X-rays showed complete healing in 3 months. The reconstruction thumb had good sensory feeling. Abduction, adduction, apposition and holding functions were satisfactory. Six months after operation the carpenter resumed his profession.

AUTHOR: None

ORG: Pharmaceutical Department, Liang-shan County People's Hospital, Shan-tung; Ho-tse Area Drug Examination Department, Shan-tung

TITLE: "Sweet Potato Starch Converted Into Glucose to Directly Prepare Glucose Sodium Chloride Infusions"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 373-374

ABSTRACT: More than 50,000 bottles of glucose saline were prepared from sweet potato starch for clinical use. There were no untoward reactions. The solutions fulfilled the requirements of the pharmacopeia. The process of preparation included conversion to glucose, neutralization, decolorization and packing. Distilled water and HCl were added to the sweet potato starch to attain pH 3; calcium ions were washed off with distilled water. The solution was further regulated to pH 1.3-1.5. The paste was put in a container and incubated for 80 minutes, thus completing the conversion to glucose. Neutralization was carried out with activated charcoal. The solution was filtered, appropriate amounts of sodium chloride and distilled water were added to make up the required concentration. The solution was then bottled for use. Tests were carried out to assure there were no impurities. The problems of hydrolysis of the starch, neutralization, treatment of the starch and pyrogen were briefly discussed.

AUTHOR: WEI Chia-hu [7279 0857 3840]
WANG Shih-t'ien [3769 0013 3944]
LI Shu-fang [2621 3219 5364]

ORG: WEI, WANG of Radiology Department, Third Clinical Institute, Kirin Medical School; LI of Radiology Department, A Hospital of the Chinese People's Liberation Army

TITLE: "X-ray Diagnosis of Tuberculosis of the Stomach"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 373-377

ABSTRACT: Seventeen cases of tuberculosis of the stomach were confirmed by operation. Eleven of the 17 also showed tuberculous diseases in other parts of the body. There were no specific symptoms or signs of tuberculosis of the stomach, they were similar to symptoms and signs of chronic gastritis, gastric ulcer or gastric carcinoma. Pathological changes included hypertrophic tuberculous changes, isolated stomach wall tuberculous masses, miliary tuberculosis or diffused tuberculous nodules of the stomach and tuberculous ulcers. X-ray examinations showed the following changes: 1. Fifteen cases showed narrowing of the pyloric antrum, causing partial or severe obstruction. The pathology extended into the duodenum in 11 cases, showing an

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH] No 6, 15 Jun 76 pp 373-377]

irregular duodenal bulb and narrowing. 2. Isolated round or oval filling defects representing masses. 3. Ulcer craters of 0.5-2 cm. X-ray differential diagnoses included gastric carcinoma, benign tumors and peptic ulcers. Characteristics of tuberculosis of the stomach include: more often seen in the age group of 20-40, younger than in carcinoma; may have tuberculous lesions elsewhere with clinical symptoms; the lesion in the pyloric antrum frequently extends into the duodenum; lesions may also be seen in the small intestine, ileocecal region and colon; peptic ulcers usually improve after treatment for 1-2 months, not so in tuberculous lesions. Three illustrative cases were reported.

AUTHOR: CH'AI Cheng-hsin [2693 2973 2450] CHENG Ho-chen [6774 5440 3791]

ORG: ENT Department, Second People's Hospital, Sin-chiang Wei-wu-erh Tribe Autonomous Area

TITLE: "Preliminary Results of Internal Transplantation to Repair Perforation of the Ear"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 378-380

ABSTRACT: From June 1972 to October 1975, temporal fascia internal transplantation was performed on 67 patients (90 ears) to repair the perforated ear drum. The indications for operation were given. Operation on all 90 ears were performed under 6X microscope, 86 were performed via the external auditory canal, 4 were performed via an internal ear approach. Lidocaine infiltration or dicaine local drops were used for anesthesia. An elliptical piece of temporal fascia was removed and sutured to the remnant edge of the ear drum. Gelatin sponge was packed in the inner ear before suture to act as a support. After suture the surface was again packed with gelatin sponge to apply pressure. Packing was removed on the 10th day. The results showed 83 perforations successfully closed, a transplant living rate of 92.2%.

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Most cases were followed for over 6 months, some for 3 years. Hearing improvement over 30 dB were obtained in 37 ears, from 15-30 dB in 40 ears. There were no improvement of hearing in 8 ears. Advantages of this method were discussed, it was also applicable to large perforations and exposure of the hammer bone. The advantages of using the temporal fascia were also cited. A few suggestions in technique were made to improve the results of the operation.

ORG: Prevention and Treatment of Organic Phosphorus Farm Chemical Poisoning Research Cooperative Group, Shanghai

TITLE: "Conference--Several Questions Concerning the Emergency Treatment of Organic Phosphorus Farm Chemical Poisoning"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 385-388

ABSTRACT: The characteristics of poisoning by different kinds of chemicals were reviewed. These included lu-kuo, phosphorus trisulfate, phosphorus amide, and 4049. Lo-kuo suppresses the action of cholinesterase, thus causing toxic symptoms. Other chemicals have similar but less severe actions. Treatment of poisoning includes: 1. Use of drugs to reactivate cholinesterase. These include Pyraloximi-methyl-chloride, pyraloximi-methiodide, toxogonin and trimedoxime. Pyraloximi-methyl-chloride and pyraloximi-methiodide may suppress respiration, toxigonin may cause cardiac complications and trimedoxime is hepatotoxic. 2. Use of atropine which neutralizes the toxic effect of acetylcholine that collects after poisoning. The initial dose should be large and given quickly. After atropinization, maintainance dose should be used. 3. Chinese herb medicines including stramonium which

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 pp 385-388]

contains scopolamine and atropine. 4. Gartric lavage for oral ingestion poisoning. The lavage must be early and thorough.

Other problems discussed were occasionally delayed sudden death after apparent recovery. The cause is unknown, but it was suggested due to severe cardiac reaction. Very few cases showed symptoms of demyelinated changes. These usually recovered after appropriate treatment. The Shanghai Psychiatric Hospital admitted 4 cases of hysteria, 2 cases of neurasthenia, 2 cases of schizophrenia and 1 case of mania melancholia a few days to more than 10 days after organic phosphorus poisoning. Most of them recovered after treatment. No toxic hepatitis appeared after organic phosphorus poisoning.

AUTHOR: SUN Chi-ch'ing [1327 0679 0987] LIANG An-ting [2733 1344 1353]

ORG: SUN of Wu-han City Children's Hospital; LIANG of Pediatric Department, Wu-han City No 8 Hospital

TITLE: "Collective Review: Concerning Infection in Immunologic Deficiency Diseases"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 389-393

ABSTRACT: The immunologic systems of the human body were reviewed. They included the thymus depending lymphocytic system (T cell system), the thymus independing lymphocytic system (B cell system), the phagocytic system and the complement body system. A brief discussion of these systems were made.

The types of immunologic deficiency diseases and the characteristics concerning infection were reviewed. Primary immunologic deficiency diseases included phagocytic system diseases such as granulocytopenia, lazy leucocyte syndrome, and chronic granulomatous diseases; complement body system diseases which included various types of gammaglobinemia and disturbances

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH] No 6, 15 Jun 76 pp 389-393]

of serum C<sub>1</sub>-C<sub>9</sub>. Secondary immunologic deficiency diseases were usually caused by virus infections such as measles and rubella; drugs such as corticosteroids, immunosuppressive drugs, anti-tumor drugs and prednisone; tumors such as Hodgkin's Disease, lymphocytic leukemia, multiple myeloma and Waldenström's Disease; gastrointestinal and renal diseases such as lymphangiectasis of the intestine, Whipple's Disease, localized enteritis, constrictive pericarditis, nephrotic syndrome, non-specific granuloma of the small intestine, malignant tumors of the gastrointestinal tract, and allergic intestinal diseases; others such as celiac disease, repeated respiratory infections, autoimmunologic diseases especially rheumatoid arthritis, general lupus erythematosis, thyroiditis and pernicious anemia.

Diagnosis depends on the history, physical examination, X-ray studies and laboratory findings. The family history (heredity), sex (mode of heredity), age of onset, type of infection and general systemic diseases were stressed. Physical examination usually revealed a thin, weak, malnourished child with repeated monilia infections. The skin frequently showed leukodermia, telangiestasis, edema and dermatitis. X-ray chest films will reveal absence of the thymus shadow. A number of laboratory tests may be performed. For humoral immunology, the immunoglobulin value and isohemagglutinin may be determined, and the bone marrow and lymph glands

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examined for lack of plasma cells. For cell immunology, the delayed hypersensitive skin test, the lymphocytic conversion test and mixed cultivation of leucocytes may be performed. Concerning phagocytosis, the phagocytotic index, the bactericidal activity, the nitroblue tetrazolium test may be performed. About the complement body system, determination of serum C3 level and skin window test may be performed.

Treatment includes giving gammaglobulin to raise the serum IgG to 200 mg./100 ml., which is sufficient to prevent bacterial infection. Other treatments include changing the factors, grafting of bone marrow or fetal thymus and giving thymin.

AUTHOR: None

ORG: Pediatrics Department, Affiliated Hsin-hua Hospital, Shanghai Second Medical School

TITLE: "Clinical Pathological Conference Case No 36--Diarrhea, Fever, Petechia, Coma, Hepato-splenomegaly"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 394-397

ABSTRACT: A 4-month-old male was admitted with diarrhea, fever, hemorrhagic dermatitis, hepato-splenomegaly and large petechiae on the face, trunk and lower extremities. A mass was palpable below the spleen. Peripheral blood showed anemia and leucocytosis. Blood and stool cultures were negative. X-ray examination of the chest showed bronchopneumonia. Spinal fluid examination was not contributory. Blood transfusions, antibiotics and supportive treatment were given without improvement. The infant died in coma, with convulsions, general anasarca and cutaneous, mucosal and gastro-intestinal tract bleeding.

The following diagnoses were considered: Abdominal tumor such as lymphoma, Wilm's tumor or neuroblastoma, but no IV pyelogram or other studies were

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 pp 394-397]

made to confirm these diagnoses. Infantile acute reticulocytosis, the fact that the condition improved for a period was against this diagnosis. Cerebropathy and lipid liver syndrome, the symptoms suggested this disease but the young age was against it. Septicemia was considered even though blood cultures twice were negative. Miliary tuberculosis was considered but there were no contacts with tuberculosis and chest X-ray films were normal. Fungus infection was considered because large amounts of antibiotics were used. General cytomegalovirus disease could not be ruled out. Immunologic deficiency disease was considered because of repeated infections which failed to respond to antibiotics, progressive lymphocytopenia was also found.

Autopsy report: No abdominal mass was found. The thymus gland was small and thin, weighing 2 gm. (normal 9.2 gm.). Microscopically the main pathology was found in the thymus. There were no Hassell's corpuscles and very few lymphocytes in the small lobules. The demarcation between the cortex and medulla has disappeared. The lymph glands over the whole body, the tonsils, appendix, submucosal lymph nodes of the small and large intestine and spleen were all poorly developed. The pathological diagnoses were: Congenital maldevelopment of the thymus with general maldevelopment of lymph glands; general cytomegalovirus disease; pulmonary alveolar proteinosis; cerebral fungus infection; generalized intravascular clotting.

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 pp 394-397]

A summarizing discussion of pulmonary alveolar proteinosis, generalized cytomegalovirus disease and primary immunologic deficiency of maldevelopment of the thymus was made.

AUTHOR: SUN Yu-sheng [1327 2589 5116]

ORG: Orthopedics Department, Chang-chow City First People's Hospital, Kiang-su

TITLE: "2 Cases of Compression Fracture of the Lumbar Spine Complicated With Rupture of the Diaphragm"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 352

ABSTRACT: Case I: A 27-year-old male was injured jumping from a train, he landed with his body in forward bent position. He complained of back pain and left upper abdominal pain. X-rays showed compression fracture of the 4th lumbar vertebra. The next day respiration became fast and difficult. X-ray films showed irregular shadows in the left chest and a collapsed lung. Operation was performed with a thoracoabdominal incision. The stomach, transverse colon, part of small intestine and spleen were found in the left thoracic cavity. A 16 cm. tear on the diaphragm was seen. The abdominal organs were reduced and the diaphragm repaired. The patient was discharged a month later and resumed work after one year.

Case II; A 29-year-old male was hurt by falling mud piles. He complained of back pain and right upper abdominal pain. The 4th lumbar vertebral

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 p 352]

spine was prominent and tender. Respiratory sounds on the right side were depressed. X-rays showed a compression fracture of the 4th lumbar vertebra and marked elevation of the right diaphragm. Laparotomy was performed. A 14 cm. tear was found on the right diaphragm, the liver has entered the thoracic cavity. The liver was replaced and the diaphragm repaired. He was discharged in 4 weeks and was working 6 months later.

ORG: Burn Unit, Affiliated Jui-chin Hospital, Shanghai Second Medical School

TITLE: "Water and Flame Burn Ointment in the Management of Infected Burn Surfaces (Abstract)"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 358

ABSTRACT: Water and flame burn ointment was used to treat deep second or third degree infected burn surfaces. The ointment includes the following herb medicines: Lithospermum officinale, angelica anamala, rhubarb, aralia edulis, rchmannia lutea, pistacia lentiscus, myrrha, bark of paeony root, evodia glouca, calcareous spar., oleum sesami, yellow wax. The method of preparation was given. The ointment was smeared on a piece of gauze and applied over the wound. Dressings were changed every other day, every day for severe infections. At each dressing the scab was cut away, the wound cleaned with saline and ointment applied. For deep second degree burn surfaces the dressing was used until complete healing. For third degree wound surfaces, after separation of dead tissue and appearance of clean granulation, skin graft was applied. With the use of this ointment, general reaction was not severe but local pus formation has increased. Therefore general support should be given.

AUTHOR: CHU Hsiu-yuan [2612 4423 1254] LI Chen-hua [2621 2182 5478]

ORG: Drug Research Department, Chinese Medical Science Institute

TITLE: "The Effect of Gyrophora Rellea on the Nutritious Blood Flow Volume of Mice Myocardia (Abstract)"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 366

ABSTRACT: The effect of gyrophora rellea was observed by using <sup>86</sup>Rb to determine the nutritious blood flow volume of micr myocardia. Gyrophora rellea or artificial gyrophora rellea was injected intraperitoneally in mice, after 30 minutes the mice myocardia was able to take up <sup>86</sup>Rb much higher than in control animals. Comparison was made of the different types of artificial fermentated gyrophora rellea. Wild gyrophora rellea and thin three gyrophora rellea had the strongest effect. Using thin tree gyrophora rellea water solution, it was found most effective when given intraperitoneally, next when given hypodermally and had no effect when given orally.

AUTHOR: CHU YÜ-k'un [2612 3768 3824]

ORG: General Surgery Department, First Affiliated Hospital, Fourth Army Medical College, Chinese People's Liberation

TITLE: "Report 2 Cases of Right Eventration of the Diaphragm Complicated With Protrusion of the Liver"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 368

ABSTRACT: Case I: A 36-year-old male complained of chest oppression and pain for one month. X-ray films showed elevation of the right side of the diaphragm with a protrusion at the middle. Thoracotomy was performed. There were wide spread adhesions among the lung, pleura, diaphragm and pericardium. No mass was found above the diaphragm. Incision over the diaphragm revealed a protruding mass from the liver. Aspiration biopsy revealed normal liver tissue. The diaphragm at that position was thin and fibrous. Plication of the diaphragm was performed and the patient recovered smoothly.

Case II: A 58-year-old male complained of upper abdominal fullness with eructation for 20 years. X-ray films revealed a mass above the right side

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of the diaphragm. Pneumoperitoneum and X-ray films indicated the mass was probably below the diaphragm. Laparotomy was performed and a liver mass 5X4 cm. was found protruding from the dome of the liver. Since the eventration was not severe, no repair was performed.

AUTHOR: WANG Ch'i-fang [3769 0366 5364] SUN Feng-ch'eng [1327 7364 1004] NING En-ti [1337 1869 1717]

ORG: Special Burn Unit, Surgical Department, First Center Hospital, Tientsin City

TITLE: "Use of Chinese Herb Medicine Jing Wan Hung in the Treatment of Burns"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 371

ABSTRACT: Jing wan hung ointment was used in the treatment of 500 cases of burns. The contents of the ointment were given. The ointment was smeared on gauze and applied to the wounds. In superficial burns without infection, application once till healing was sufficient. With infected deep burns, daily or twice daily dressings were changed in combination with bathing and debridement, until the wound was clean for grafting. In 99 deep infected burns, the wounds became clean on an average of 9.5 days, skin graft was successful in over 98%. In 74 extensive burn surfaces with late stage small scattered wounds, healing of wounds of 1 cm. diameter occurred in 7-10 days after using the ointment. In 210 cases of superficial second degree burns

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 p 371]

of less than 5% surface area, healing occurred on an average of 9 days. In infected deep burns, use of the ointment removed necrotic tissue but pus increased locally, causing fever and anorexia. The importance of general support was stressed.

ORG: Burn Unit, Affiliated Hospital, Sze-chuan Medical School

TITLE: "Compound Polygonum Cuspidatum in the Treatment of Burn Surfaces (Abstract)"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 374

ABSTRACT: From January 1972, more than 200 cases of burn surfaces were treated with compound polygonum cuspidatum with good results. The compound contains polygonum cuspidatum, rhubarb and bletilla hyacinthina. If exposure treatment was adopted, the compound was smeared on the wound surface after wound cleansing. If dressings were applied, the gauzes were soaked with the compound and applied on the wound. For all burns below 50% of body surface, no matter if the wound was superficial or deep, all surfaces were covered with the compound. For burns over 50% of body surface, part of the wound surface was covered with the compound.

AUTHOR: None

ORG: Neurology Department, Yen-pien Hospital, Chi-lin Province

TITLE: "Successful Emergency Treatment of Case of Acute Infectious Polyneuritis Complicated With Respiratory Muscle Paralysis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 377

ABSTRACT: A 14-year-old male was admitted with progressive paralysis of the extremities and difficult breathing for 3 days. The next day respiration entirely stopped. Endotracheal intubation and artificial respiration were performed, followed by tracheotomy. Life was thus maintained. About 1 month later spontaneous breathing began and slowly improved. He developed epileptic fits and became unconscious, but was controlled with IV sodium amytal and sorbitol. After 121 days spontaneous respiration was satisfactorily restored and the respirator was removed. One year later, except for a slight dragging gait, there were no other sequelae.

ORG: Anesthesia Department, Affiliated Sin-hua Hospital, Shanghai Second Medical School

TITLE: "Use of Chinese Medicine Anesthesia for Operation on a Patient With Complete Atrioventricular Block Complicated With Atrial Fibrillation"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 380

ABSTRACT: A 63-year-old male was admitted suffering from carcinoma of the pyloric antrum of the stomach. He also had complete atrioventricular block complicated with atrial fibrillation. Chinese medicine scopolamine was used for anesthesia and an endotracheal tube was inserted. During anesthesia the atrioventricular block disappeared, although atrial fibrillation persisted. The pulse was maintained at 76-88/min. Because of wide spread metastasis, a gastrojejunostomy and jejunojejunostomy was performed. The operative course was smooth.

AUTHOR: None

ORG: Rheumotoid Disease Research Group, First Affiliated Hospital, K'ung-ming Medical School

TITLE: "Conclusion on the Clinical Observation of 110 Cases of Rheumatoid Arthritis Treated With Tripferygiuw Hypogalucum"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 384

ABSTRACT: Chinese herb medicine tripferygiuw hypoglaucum Hutch. was used in the treatment of 110 cases of rheumatoid arthritis. The herb was soaked in white wine for one week before use. It was taken three times a day. All cases had arthritic pain, after medication the pain disappeared or markedly decreased in 52 cases, improved in 47 and was not affected in 11. Among 99 cases with joint swelling, after treatment the swelling was markedly improved in 58, improved in 39 and had no effect in 2. Among 104 cases with impairment of joint function, after treatment 22 had complete recovery of function, 80 were improved and 2 were not effective.

Improvement usually occurred about 2 weeks after medication. Among 37 cases with increased sedimentation rate, 11 reverted to normal and 13 showed

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 6, 15 Jun 76 p 384]

improvement after treatment. Side reactions included gastric pain in 11 cases, amenorrhea in 6, palpitation in 5 and pigmentation of the face in 5.

AUTHOR: HSU Pao-yi [1776 1405 0034] HU Ju-ch'i [5170 3067 7784]

ORG: Pang-pu Medical School

TITLE: "Combined Chinese and Western Medicine in the Treatment of Villonodular Pigmented Synovitis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 388

ABSTRACT: A 57-year-old male was admitted because of left knee continuous swelling and pain for over 2 years. Operation on the knee joint revealed over 100 ml. of red fluid. The synovium was rough and covered with villi. Biopsy diagnosis was villonodular pigmented synovitis. Acupuncture and Chinese herb medicine were given. After 4 months the condition was close to normal. Another operation was performed 8 months later. There was a small amount of yellow fluid. The synovium was dark red, no villi were seen. Pathological examination revealed chronic inflammation. Chinese herb medicine treatment was continued. Followup studies one year later showed the patient working and in good generation condition.

AUTHOR: CHUANG Yin-lun [8369 519A 0243] LI Ta-ch'lan [2621 6671 2938]

ORG: CHUANG of Pediatrics Department, Feng-cheng People's Hospital, Tsao-chuang City, Shantung; LI of Pediatrics Department, Sheh-cheng People's Hospital, Tsao-chuang City, Shantung

TITLE: "The Depth of Puncture and the Puncture Needle in Lumbar Puncture in Children"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 398-399

ABSTRACT: Ordinary injection needles connected with a syringe were used to perform lumbar puncture on 300 children under 14 years of age. The size of the needle used was progressively larger with increase of age, varying from No 5-5 1/2 to No 9. After the needle has entered the subarachnoid space, it was marked at the skin level. On removal the length from the needle point to the mark was measured. Thus the size of the needle and the depth of puncture in different ages were tabulated. It was suggested that 3 different sizes of lumbar puncture needles be produced for use in children.

AUTHOR: Ch't Hung-chieh [4234 7703 2638] FAN Yung-k'ang [5400 3057 1660]

ORG: Surgical Department, First Hospital, Textile Industry Bureau, Shanghai

TITLE: "Varicose Vein Stripper"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 pp 399-400

ABSTRACT: A modified Keeley varicose vein stripper was devised and used with good results. A diagram of the instrument was given. The instrument includes a stripper axle filament and a stripper head. The stripper head is fitted on the outer circumference of the vein to be stripped, and when the axle filament strips the vein, the vein is curled up in the stripper head. The instrument has the advantages of both intra and extra cavity instruments, the whole vein can be stripped off without being broken off by side branches. After stripping deep pressure should be applied to control bleeding.

AUTHOR: HSIEH K'un [0673 2492]

ORG: Chang-shou Hydrolic Power Staff Hospital, Chung-king

TITLE: "Utilizing Neutralization of Acid and Base to Loosen and Remove External Ear Cerumen Obstruction"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 400

ABSTRACT: To remove cerumen obstructing the external ear canal, 3% sodium bicarbonate is dropped into the external canal. A few minutes later the fluid is allowed to drain out. Then 1% citric acid is dropped into the canal. Soon air bubbles will be formed and the firm cerumen will be washed out.

AUTHOR: CHANG Hui-ts'ung [1728 1979 5115] CHANG Hsing-jen [1728 5281 0088]

ORG: Medical Station, Tai-ping Commune, Chang-ling County, Chi-lin Province

TITLE: "Aspiration Treatment for Cystic Hygroma"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 400

ABSTRACT: A new born girl was admitted with an irregular soft mass on the left side of the neck, extending behind the ear and submaxillary angle. It disappeared under pressure. On the 6th day the mass was aspirated and 20 ml. of light yellow fluid was obtained. One week later another aspiration was performed. After one month the mass became slightly smaller and after three months it was about half its original size. In 6 months it entirely disappeared. The authors suggested that aspiration and massage caused an aseptic inflammation which closed the lymphatic channels and effected a cure.

ORG: None

TITLE: "Hwang Ch'in Tai -- A New Drug for Treatment of Hepatitis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 355

ABSTRACT: Hwang ch'in tai tablets were used to treat 71 cases of acute icteric hepatitis, acute non-icteric hepatitis and active chronic hepatitis. The clinical cure rate was 97.2%. After medication the symptoms and liver function showed different degrees of improvement, the appetite was increased and sleeping improved.

AUTHOR: None

ORG: None

TITLE: "Vitamin K3 for the Treatment of Abdominal Pain"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 363

ABSTRACT: Vitamin K<sub>3</sub> was given to 52 cases of abdominal pain to relieve pain. The diseases causing the pain were treated accordingly. For adults 2 ml. (8 mg.) were given and for children 1 ml. was given intramuscularly. The effective analgesic rate was over 90%. It was usually effective in 10-40 minutes and lasted 3-8 hours. No side reactions occurred. The diseases included peptic ulcer, gastroenteritis, gastroenteric spasm, bacillary dysentery, ascariasis of the bile ducts, intestinal obstruction, appendicitis, and others.

ORG: None

TITLE: "Ma-lin-kua for the Treatment of Influenza"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 363

ABSTRACT: The Affiliated First Hospital of Wu-han Medical School and two other units reported using ma-lin-kua to treat influenza. Ma-lin-kua 100 mg. was given three times per day for three days. Followup showed all 45 cases had subsidence of fever in 1-2 days with disappearance of all symptoms. There were no side reactions.

AUTHOR: None

ORG: None

TITLE: "Levamisole, A New Broad Spectrum Vermifuge"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] No 6, 15 Jun 76 p 393

ABSTRACT: Levamisole is effective against ascariasis, hookworm disease, complications of ascariasis and hookworm disease and ascariasis of the bile ducts. Recently it was found also effective against filariasis. The doses and mode of administration for the different infestations were given. Generally there were no untoward effects. A few had slight reactions such as dizziness, abdominal pain, nausea, headache, diarrhea and excitement, which usually soon disappeared. A number of medical institutions have used the drug with satisfactory results.

8774

CSO: 4009

#### ACTA ENTOMOLOGICA SINICA

AUTHOR: None

ORG: Agriculture Group, Bureau of Agriculture and Forestry, Hopei Provincial Revolutionary Committee

TITLE: "Achievements From the Four-Ranked Network of Crop Disease and Pest Prognosis Bear Witness to Smash the Right Deviationist Attempt"

SOURCE: Peking K'UN-CH'UNG HSUEH-PAO [ACTA ENTOMOLOGICA SINICA] Vol 19 No 3, Aug 76 pp 241-246

EXCERPT OF ENGLISH ABSTRACT: In the present paper the experiences from the four-ranked network of crop disease and pest prognosis and control are summarized. The essential points may be listed as follows: (1) The basis to carry out successfully plant protection work is to grasp class struggle as the key link; (2) To carry out conscientiously the principle of prevention for the main and adopting integrated control ensures the success in crop disease and pest control; (3) The mass movement of scientific experiment promoted the development of technology in plant protection; (4) To strengthen the party's leadership is a guarantee for the success in plant protection work.

AUTHOR: P'U Che-lung [5543 5832 7893]

ORG: Department of Biology, Chung-shan University

TITLE: "Biological Control of Insect Pests in China"

SOURCE: Peking K'UN-CH'UNG HSUEH-PAO [ACTA ENTOMOLOGICA SINICA] Vol 19 No 3, Aug 76 pp 247-252

EXCERPT OF ENGLISH ABSTRACT: After the liberation biological control of insect pests in our country has undergone a rapid development which is further spurred by the mass movement of scientific experiment after the great proletarian cultural revolution. Now many people's communes have established their own biological control stations to cultivate parasitoid wasps and insect pathogenic microbes. The measures of biological control in China may be divided into the following groups: (1) Mass culture and release of parasitoid and predaceous insects; (2) Introduction of parasitoid and predaceous insects from other areas within our country or from abroad; (3) Conservation of parasitoid and predaceous insects; (4) Microbial control of insect pests; and (5) Conservation and attraction of entomophagous birds.

AUTHOR: CHOU Ming-tsang [0719 2494 3647] HSIEH I-ch'uan [6200 0110 6898] YU Chen-ch'iu [0151 2182 3808]

ORG: CHOU, HSIEH of Department of Plant Protection, Hua-pei University of Agriculture; YU of Plant Breeding Station, Second Division, Inner Mongolia Production and Construction Troops

TITLE: "Studies on the Breeding for Spring Wheat Varieties Resistant to the Wheat Stem Maggot, Meromyza Saltatrix Linnaeus and the Mechanism of Resistance"

SOURCE: Peking K'UN-CH'UNG HSUEH-PAO [ACTA ENTOMOLOGICA SINICA] Vol 19 No 3, Aug 76 pp 253-262

EXCERPT OF ENGLISH ABSTRACT: This work began in 1960 at the Chung-tan Agricultural Station in the western part of Inner Mongolia. In this region, alkaline soils and rust diseases are also serious problems in wheat production. Therefore, besides the resistance to the wheat stem maggot, the aims of wheat breeding include also the requirements of resistance or tolerance to alkaline soils and rust diseases. From the wheat varieties on hand at that time, varieties resistant to the wheat stem maggot and alkaline soils were crossed with proper high-yielding and rust resistant or tolerant varieties. In 1967, two new varieties bred out, 6410 and 6407, which were put into wheat production.

# [continuation of K'UN-CH'UNG HSUEH-PAO Vol 19 No 3, 1976 pp 253-262]

In 1974, another 5 varieties, 6528, 6532, 6548, 6510, and 6556 were bred out. According to union field plot tests at different localities and normal farm production, it is proved that 6410 yields more than the chief local variety, Hsiao-yang-pei and the main variety in extension Pei-ou- jou and is significantly resistant to the wheat stem maggot and tolerant to alkaline soils and rust diseases. But, with sufficient irrigation and fertilizers, 6410 is liable to suffer from lodging during ripening stage in case of storms. In order to get rid of this defect, since 1974, 6410 was crossed with some newly introduced varieties with short and stiff stems in search for even better new varieties.

ORG: Plant Chemical Protection Teaching and Research Group, Kuangtung College of Agriculture and Forestry

TITLE: "Preliminary Experiments on the Application of Juvenoids in the Control of Agricultural Insect Pests"

SOURCE: Peking K'UN-CH'UNG HSUEH-PAO [ACTA ENTOMOLOGICA SINICA] Vol 19, No 3, Aug 76 pp 263-281

EXCERPT OF ENGLISH ABSTRACT: Beginning from 1975 a series of preliminary laboratory and field experiments on the application of insect juvenile hormone analogs (juvenoids) for the control of the paddy borer (Tryporyza incertulas) and several species of aphids were conducted in Kuangtung and Shantung Provinces. Altogether 6 compounds have been tested: (1) Altosid (ZR-515) - isopropyl ll-methoxy-3,7,11-trimethyl-dodeca 2,4-dienoate; (2) ZR-777 - prop-2-ynyl-3,7,11-trimethyl-dodeca-2, 4-dienoate; (3) 734-II (J002) - 3,7-dimethyl-7-epoxy-2-octenol-p-ethyl phenylether; (4) An intermediate product of 734-II; (5) 734-II (J003) - 7-methoxy-3,7-dimethyl-2-octenol-p-ethyl penyl ether; (6) 738 (JH25) - 7-ethoxy-1 (p-ethylphenoxy)-3,7-dimethyl-2-octene. The results of the experiments are summarized.

AUTHOR: T'ANG Cheh [0781 6030]

ORG: Chekiang University of Agriculture

TITLE: "The Chinese Gallnuts, Their Multiplication and Means for Increasing Production"

SOURCE: Peking K'UN-CH'UNG HSUEH-PAO [ACTA ENTOMOLOGICA SINICA] Vol 19 No 3, Aug 76 pp 282-296

EXCERPT OF ENGLISH ABSTRACT: The Chinese gallnuts have long been known as a valuable forest by-product of hilly regions. Following the development of China's socialist construction, gallnut is finding an increasingly wide range of utility. The gallnuts produced in the hilly regions in chekiang Province are of three types, namely, the horned galls, by aphid Schlechtendalia chinensis Bell; the Pei-hua or gallflowers, by aphid Nurudea (Nurudeopsis) shiraii (Mats.); and the Hung-pei-hua or the red gallflowers, by aphid Nurudea (Nurudeopsis) rosea(Mats.) The first named being the predominant type. This paper chiefly reports the results of a preliminary study on artificial multiplication of the horned gall aphid, Schlechtendalia chinensis Bell. Life cycle of the horned gall aphid in the Hsien-chu mountain district of Chekiang Province is shown.

ORG: Ho-chiang District Institute of Agriculture, Heilungkiang Province

TITLE: "A Summary of Experiments on Corn Borer Control by Utilization of Trichogrammatid Wasps"

SOURCE: Peking K'UN-CH'UNG HSUEH-PAO [ACTA ENTOMOLOGICA SINICA] Vol 19 No 3, Aug 76 pp 297-302

TEXT OF ENGLISH ABSTRACT: Experiments on large scale in corn borer control by using trichogrammatid wasps have proved that this method is effective and can save much human labor. The essential point to ensure effective control is to produce active and healthy wasps and to liberate them in the appropriate time. Our experience shows that the rates of borer control generally excel 70% or 80%. Mass rearing of the parasitic wasps can be effected through semi-mechanization.

AUTHOR: None

ORG: Shang-ch'iu District Institute of Agriculture and Forestry; Yu-ch'enghsien Institute of Agriculture and Forestry; Teng-ch'iao Brigade Scientific Research Station, Kuo-ts'un Commune, Shang-ch'iu District, Honan Province

TITLE: "A Preliminary Study on the Bionomics of Hunting Wasps and Their Utilization in Cotton Insect Control"

SOURCE: Peking K'UN-CH'UNG HSUEH-PAO [ACTA ENTOMOLOGICA SINICA] Vol 19 No 3, Aug 76 pp 303-308

TEXT OF ENGLISH ABSTRACT: Among the hunting wasps in Shang-ch'iu District the dominant species Polistes jokahamae Radoszkowski and Polistes sp. can be used for insect pest control in the cotton fields. Their bionomics have been studied. They prefer later instar larvae of Heliothis armigera, Anomis flava, Etiella zinckenella, and Pieris spp. as food. Their nests can be artificially transferred into cotton fields in the evening after eight o'clock. They are effective to control Heliothis armigera and Etiella zinckenella by means of introducing colonies consisting about one hundred wasps per mu. A control rate about 70% to 80% can be attained after five to seven days after nest transferring. They can be used together with other insect predators such as labybird beetles and green lacewings to control cotton insects.

ORG: Pest Natural Enemies Research Group, Department of Biology, Wuhan Normal College

TITLE: "Studies on Green Lacewings (Chrysopa spp.) and Their Use in Biological Control"

SOURCE: Peking K'UN-CH'UNG HSUEH-PAO [ACTA ENTOMOLOGICA SINICA] Vol 19 No 3, Aug 76 pp 309-317

EXCERPT OF ENGLISH ABSTRACT: According to our preliminary observations made in some hsien of our province, it was found that there are about 4 species of green lacewings in the cotton field: Chrysopa sinica Tjeder, C. septempunctata Wesmael, C. formosa Brauer, and C. sp. The larvae of these 4 species can prey on many kinds of insect pests of different developmental stages. Different species of green lacewings differ in predactious capacity. The larvae of the individual species differ in preying on different kinds of insect pests. With the increase of the stadium, the predactious capacity is gradually increased. The predactious capacity of the larvae of the green lacewings preying on varied kinds of insect pests is, in general, higher than those preying only on the same kind of insect pests.

AUTHOR: FANG Yu-ch'ing [2455 5148 0615]

ORG: Lu-shan Botanical Garden

TITLE: "A Preliminary Study on the Biology and Control of the Geometric Euctenurapteryx Nigrociliaria Leech"

SOURCE: Peking K'UN-CH'UNG HSUEH-PAO [ACTA ENTOMOLOGICA SINICA] Vol 19 No 3, Aug 76 pp 318-324

TEXT OF ENGLISH ABSTRACT: The geometrid Euctenurapteryx nigrociliaria Leech is a serious pest of the plum yews. In Lu-shan it has a single generation per year and overwinters in the egg stage. The ova are deposited on the under surface of the yew leaves, in the crevices of barks and also on the weeds, and hatch in later March of the next year. The damage on the foliage increases as the larvae grow. The larvae are gregarious and consume only the epidermal layer of the leaves before the third instar, but become dispersed and gnaw off the whole leaf or even the bark after the third instar. Chemical control must be carried out when the larvae are young. Chemical and other measures of control have been tested and discussed.

AUTHOR: CHAO Yang-ch'ang [6392 7402 2490]

ORG: Peking Institute of Zoology, Chinese Academy of Sciences

TITLE: "A New Species of Anthribus Forster Predaceous Upon the Chinese Wax Scale (Coleoptera: Anthribidae)"

SOURCE: Peking K'UN-CH'UNG HSUEH -PAO [ACTA ENTOMOLOGICA SINICA] Vol 19 No 3, Aug 76 pp 339-341

EXCERPT OF ENGLISH ABSTRACT: The gives the description of a new species of the genus Anthribus Forster: Anthribus lajievorus sp. nov. Its larvae are predaceous upon the females and eggs of the Chinese wax scale, Ericerus pela (Chavannes.) It is said that 80-100% of the female scales and eggs are usually consumed by the beetle larvae in Southwestern China, the main productive area of the Chinese wax. The present species is closely related to Anthribus niveovariegatus (Roelofs) from Japan, but differs from the latter in the following points: with a longitudianl depression on the rostrum, the lateral carina of pronotum extending a little before the middle, antenna and tarsa blackish, body covered with greyish-white pubescence, interspersed with black one.

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## ACTA MICROBIOLOGICA SINICA

AUTHOR: None

ORG: Enzyme Structure and Function Research Group, Institute of Microbiology, Chinese Academy of Sciences, Peking

TITLE: "Glucoamylase of Monascus sp.: I. Purification and Crystallization"

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 200-205

TEXT OF ENGLISH ABSTRACT: Glucoamylase of Monascus sp. has been shown to exist in multiple forms, separable by polyacrylamide gel disc-electrophoresis as nearly located bands. After ammonium sulfate fractionation, gel filtration and DEAE-cellulose column chromatography, 2 fractions of the eluate were obtained. Fraction I mainly consists of band 4, while fraction II, mainly band 3. Both fractions have been purified 2.5 fold with a total recovery of 27%. Crystallization of glucoamylase was achieved by extracting the enzyme protein with ammonium sulfate solutions of decreasing concentration at 0 and standing at 7 for several weeks. Crystals separated out in extracts of 56, 54, and 52% of salt saturation as needles or clusters of needles like wheat-sheaf, or in radial or globular forms. The large diameter of the clusters is 50-100 Mm.

AUTHOR: YANG Yun-p'eng [2799 0061 7720] YUEH Te-ch'ao [1971 1795 6389] HUO Tze-min [7202 3419 3046]

ORG: All of Institute of Pharmacology, Chinese Academy of Medical Sciences, Peking

TITLE: "Submerged Culture of Armillaria Mellea"

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 206-213

TEXT OF ENGLISH ABSTRACT: In order to produce the mycelium of Armillaria mellea (Vahl ex Fr.) Quel. by submerged culture technique, a study has been made on the fermentation condition of the fungus. The following optimal conditions were verified, the medium composition: 2.0% sucrose, 1.0% glucose, 1.0% soybean cake meal, 1.0% silkworm chrysalis meal, 0.075% MgSO<sub>4</sub>·7H<sub>2</sub>O, 0.15 % KH<sub>2</sub>PO<sub>4</sub>, and 0.2% soybeam oil, with natural pH, optimal amount of inoculum being 15%, rate of aeration 0.3-0.5 (v/v/min.) The inoculated culture was incubated at 25-27°C for 6-7 days. Fermentation usually stopped when the pH decreased to about 5.0 and residual sugar decreased to about 0.5-0.3%. The mycelium of this fungus under submerged condition is colorless, filamentous, septate, and branched. Using fermentative culture of Armilaria mellea instead of using T'ian-ma (Gastrodia elata Blume) not only would greatly shorten the growth cycle, avoid various natural limitations including weather conditions, but also permit its large scale production in the factory, thus providing a new approach for its broad utilization.

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ORG: Tientsin Institute of Industrial Microbiology, Tientsin; The Tientsin Saccharin Manufactory, Tientsin; The Ch'ang-chou Wei-chin (Monosodium-Glutamate) Manufactory, Ch'ang-chou

TITLE: "Production of Industrial Grade Citric Acid From n-Paraffin by Candida Lipolytica 8-2"

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 214-219

TEXT OF ENGLISH ABSTRACT: A strain of yeast which can produce citric acid from n-paraffin was isolated from the soil of orchards, and identified as Candida lipolytica 8-2. The citric acid produced by this strain amounts to 50% of the total acids. In shaking flasks or 500 1. fermentors with a medium containing 10-12% paraffin, 0.25-0.50% corn steep liquor and 6% CaCO<sub>3</sub> as neutralizing agent, strain 8-2 accumulates from 7% up to 10.72% citric acid for industrial usage.

AUTHOR: None

ORG: Shanghai Institute of Industrial Microbiology; The Shanghai Distillery, Shanghai

TITLE: "Studies on the Production of Acid Protease by Aspergillus Niger in Submerged Culture: II. Some Properties of the Acid Protease Obtained From Aspergillus Niger 3.350"

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 220-223

TEXT OF ENGLISH ABSTRACT: Some properties of the acid protease obtained from Aspergillus niger 3.350 were investigated with milk casein as a substrate. The optimum pH for enzyme action was pH 2.5-3.0 and the optimum temperature 45-47°C. This enzyme was stable at pH 2.5 but lost its activity below pH 1.0 and above pH 5.0. The enzyme was found to be stable below 40°C but lost its activity at 55°C after incubation at different temperatures at pH 2.5 for 120 minutes. This enzyme was activated by Cu<sup>1</sup>, Mn<sup>1</sup>, and Al<sup>1</sup>, but not inhibited by metal chelating reagent such as EDTA, while it was inhibited by sodium lauryl sulfonate.

ORG: Cooperative Research Group of Polio Type III Vaccine, Kunming Institute of Medical Biology, Kunming

TITLE: "Studies on New Attenuated Strains of Type III Live Poliomyelitis Vaccine: II. Investigation in a Series of Field Trials With "Chung" III2 Virus"

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 224-230

TEXT OF ENGLISH ABSTRACT: The results of investigation in four field trials with "Chung" III2 Virus are reported in the present paper. (1) A total of 245,262 children were fed the vaccine in programs by our organization. No serious complications were noted. (2) A total of 287 children from 6 months to 5 years of age were examined serologically in these trials. The neutralizing antibody conversion rates were approximately 72.3 to 100.0 per cent. 67.3 to 76.8% showed an enhancement of antibody for four times or over. 3.218 out of a total of 268 children excreted homotypic viruses (81.3%.) (4) To investigate the genetic stability of the "Chung" III2 virus, we compared it with USOL-Dbac strain. The neurovirulence of both strains is more or less recovered in the monkey. There is no significant difference in genetic stability between the two viruses during their growth in human alimentary tract. This paper was received for publication on 28 January 1976.

## AUTHOR: None

ORG: Department of Plant Protection, Northwest Agricultural College, Wu-kung; Agricultural Institute of Hsi-an, Hsi-an

TITLE: "Studies on the Cucurbit Viruses in the Vicinity of Hsi-an"

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 231-239

TEXT OF ENGLISH ABSTRACT: The viruses of 195 cucurbit virus samples are identified as Muskmelon mosaic virus (MMV) and Cucumber mosaic virus (CMV.) MMV is chiefly isolated from Cucurbita pepo L., C. maxima Duch., Cucumis melo L., Cucurbita moschata Duch. and Cucumis sativa L. Citrullus vulgaris Schrad. is only infected by MMV; CMV is isolated from Benincasa hispida Cogn. and Luffa cylindrica Roem. From the muskmelon and vegetable marrow, we have isolated new strain of CMV. Field observations reveal that the insect vectors responsible for the primary infection and the spread of the vegetable marrow virus diseases in the field are Aphis gossypii, A. persicae, and Rhopalosiphum brassicae. The seeds from infected plant do not transmit the virus. There are

[continuation of WEI-SHENG-WU HSUEH-PAO Vol 16 No 3, pp 231-239]

some differences in the disease resistance among 22 varieties, although none of them is immune or highly resistant. Control the vectors with systemic insecticides and application of suitable cultivation practices can reduce the disease prominently.

AUTHOR: None

ORG: Cellulose Research Group, Institute of Microbiology, Chinese Academy of Sciences, Peking

TITLE: "Purification and Some Properties of  $C_1$  Enzyme ( $\beta$ -1,4 Glucan Cellobiose Hydrolytic Enzyme) From Trichoderma Viride"

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 240-248

TEXT OF ENGLISH ABSTRACT: A cellulolytic enzyme (C<sub>1</sub> enzyme) has been isolated from Koji extract of Trichoderma viride X<sub>2</sub>-85. The purified enzyme is homogeneous as shown by polyacrylamide gel disc electrophoresis and ultracentrifugation. The purified enzyme shows no activity towards carboxymethylcellulose or **3** - glucoside (cellobiose) under our assay conditions. Crystalline cellucose, phosphoric acid-swollen cellulose and dewaxed cotton can be degraded by the enzyme to cellobiose as a main product. The molecular weight of the enzyme was determined to be 54,000 and 55,000 by Sephadex G-100 gel filtration and by sodium dodecyl sulfate-polyacrylamide gel electrophoresis respectively. The sedimentation coefficient of the enzyme was found to be 4.18.

ORG: Research Group of Virus Replication, Institute of Microbiology, Chinese Academy of Sciences, Peking

TITLE: "Isolation and Characterization of the Replicative Form of TMV-RNA"

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 249-255

TEXT OF ENGLISH ABSTRACT: The double stranded RNA specific to TMV-RNA had been isolated by cellulose (Serva) Column chromatography of the total RNA extracted from <sup>32</sup>P-labeled TMV-infected (Nicotiana tabacum) tobacco leaves. It is resistant to RNase treatment under a condition of high ionic strength. It has also been characterized by denaturation, annealing, and hybridization tests. Its mol. wt. is 3.8 x 10° as determined by polyarcylamide gel electrophoresis. Judging by the properties mentioned above, the RNA in question is definitely the replicative form of TMV-RNA.

AUTHOR: TSANG Mu [5258 4476] 10 Heng-wen [5012 0077 2429]

ORG: TSANG of Yunnan Provincial Institute of Botany, Kunming; IO of Yunnan Provincial Institute of Tea, Meng-hai

TITIE: "Preliminary Observations on Entomophthora Sphaerosperma Fres. Parasitizing Empoasca Flavescens Fab."

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 256-257

ABSTRACT: Empoasca flavescens Fab. is one of the major pests of tea trees in Yunnan Province; the quality and yield of tea are being seriously affected. Since 1973, the authors have come to notice that there is a fungus, Entomophthora sphaerosperma Fres. belonging to the Family Entomophthoraceae, parasitizing this pest of the tea trees of Camellia sinensis (L.) O. Kitze. and C. sinensis f. macrophylla (Sieb.) Kitamura. Experimentally, this fungus has been found to have a definite suppressing action against the pest. The observation and the experiment are reported.

AUTHOR: T'ien Po [3944 3134]

HSI Chung-hsing [1153 0112 5281]

ORG: Both of Institute of Microbiology, Chinese Academy of Sciences, Peking

TITIE: "The Application of Protoplast in Plant Virology and Its Prospects"

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 258-266

ABSTRACT: Due to the fact that plant virus cannot actively infect a plant cell, can only enter the cell through a wound, synchronous infection with a single cell or single layer tissue culture is not possible. This fact had caused plant virology to lag far behind studies on phagocytes and animal virology. In 1966, Cocking of England first proved that TMV can invade the protoplast of tomato and Takebe et al of Japan created the techniques of isolating highly active protoplasts and inoculating them with viruses in 1968. The authors of this paper repeated the experiments. In this paper, they discuss the problems and advantages of this technique to demonstrate its potential in resolving such theoretical problems as infection, replication, heredity, and immunity in plant virology and the favorable condition it provides to the future prevention and control techniques of virus diseases.

AUTHOR: None

ORG: None

TITLE: "Rules of the Use of Scientific and Chinese Names as Formulated by the Editorial Committee of the CRYPTOGAMIC FLORA OF CHINA"

SOURCE: Peking WEI-SHENG-WU HSUEH-PAO [ACTA MICROBIOLOGICA SINICA] in Chinese Vol 16 No 3, Sep 76 pp 267-268

ABSTRACT: At the Conference of the Editorial Committee of the various volumes of CRYPTOGMIC FIORA OF CHINA, held in Peking in May 1976, the following problems among others regarding the rules of using scientific names and Chinese names were resolved: (1) All names referring to Taiwan should use taiwaniana and absolutely not formosana; (2) Names of persons should not be used to denote new species, varieties, etc; (3) All names of species should be in lower case regardless of the origin of the term; (4) Political mistakes should be avoided when Chinese names are used; for example, names commemorating persons, foreign or domestic, ancient or modern are to be changed, while abolished original names are to be treated as aliases.

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